

Creating a Sustainable, Viable  
Farming and Food System that Supports  
Our Communities

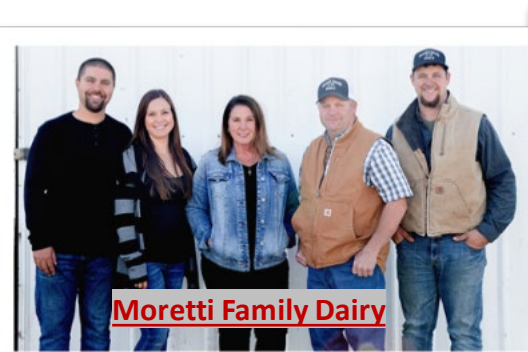
ALBERT STRAUS  
FOUNDER  
*Organic Dairy Farmer*

**January 27, 2024**



**STRAUS FAMILY CREAMERY IS MISSION-DRIVEN:**

*“To help sustain family farms in Marin and Sonoma Counties by providing high quality, minimally processed organic dairy products and to support family farming and revitalize rural communities everywhere through advocacy and education.”*



**Moretti Family Dairy**



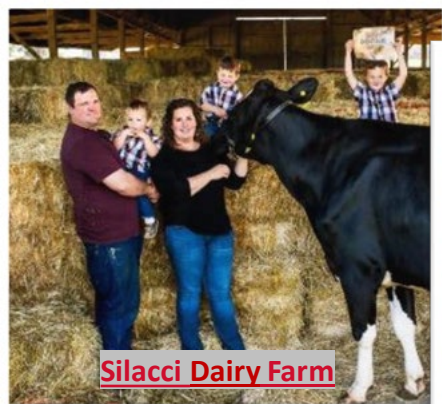
**Hughes Family Dairy Farm**



**Correia Family Dairy Farm**



**Straus Dairy Farm**



**Silacci Dairy Farm**



**Tresch Family Farms**



**Silva Family Dairy Farm**



**Necesshi Dairy**



**Mendoza Dairy Farm**



**Robert McClelland Dairy**



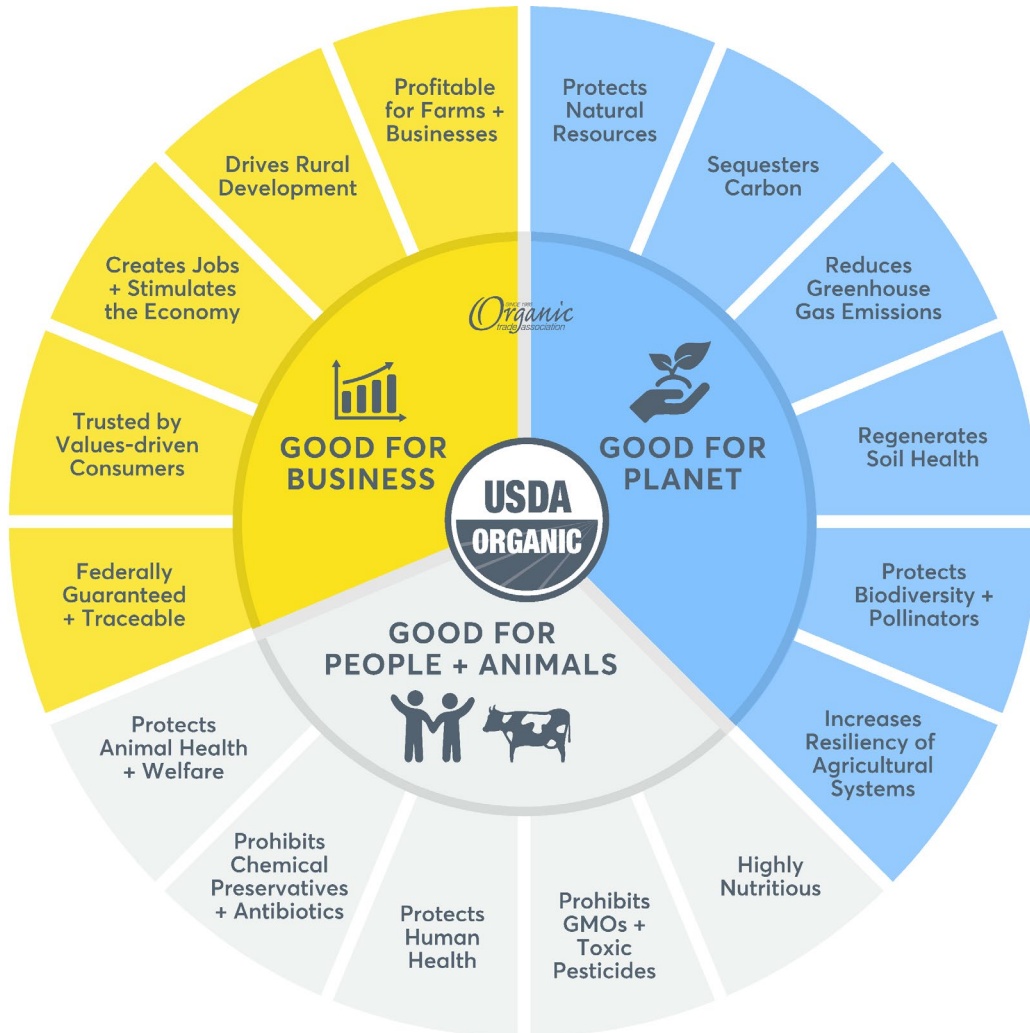
**JJ's Family Dairy Farm**



**Drakes View Dairy**

Located in the coastal region, north of San Francisco, Straus Family Creamery sources organic milk from thirteen organic family farms all located within 30 miles of the Creamery.





- ❑ The Organic Label is the Gold Standard.
- ❑ Less than 1 % of American farmland is organic.
- ❑ More than half of the fresh fruit and almost a third of the fresh vegetables Americans buy now come from other countries.
- ❑ Imported to the United States:
  - ❑ 11 % of beef
  - ❑ More than 90% of seafood
  - ❑ More than 80% of lamb

*Some stats are sourced from the USDA*

# Carbon-Neutral Organic Dairy Farming Model



## Methane Digesters



## Reducing Enteric Methane (Cow Burps) with Red Seaweed



## Electric Farm Vehicles



## Pastureland Carbon Sequestration & Regenerative Agriculture (Carbon Farming)



**Organic and Climate-Positive Farming Practices Create the Pathway to Carbon-Neutral Dairy Farming**



# What is the future of milk?



## CLIMATE POSITIVE



Organic farming is essential to building a resilient food system



Methane digester converts cow manure into renewable energy



Red seaweed supplements in cow feed reduce enteric methane emissions (cow burps)



Carbon farming regenerates the soil and enhances carbon sequestration



Electric farm equipment eliminates fossil fuels

Straus Dairy Farm's organic milk will have a climate-positive footprint, equal or lower to dairy alternatives.



- ❑ This data demonstrates that Straus Dairy Farm's organic milk will have an equal or lower climate-positive footprint to alternative dairy products upon implementation of the *Carbon-Neutral Dairy Farming Model*.
- ❑ The numbers represent agriculture and food manufacturing emissions.

*More details available*

<https://www.strausfamilycreamery.com/carbon-neutral-infographic/>

# Reducing Cow Methane Emissions w/Methane Digester



## *Operating on Straus Dairy Farm since 2004*

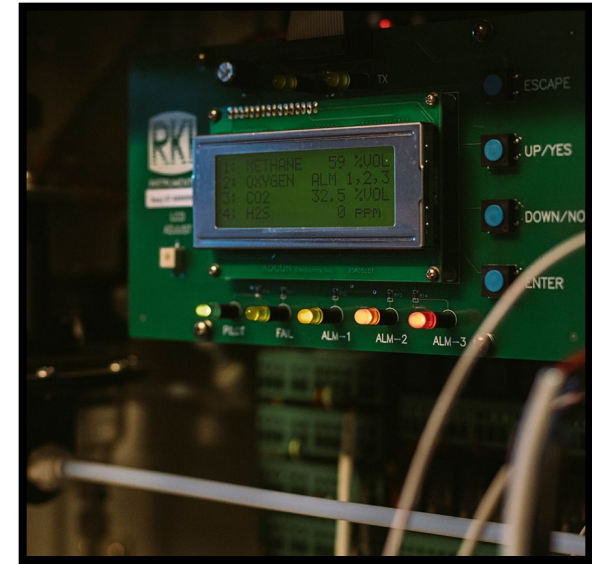
- ❑ The methane digester captures methane (a potent greenhouse gas) from the cow's manure and transforms it into electricity.
- ❑ Biogas (made from mostly methane) is burned in an engine and makes renewable electricity.
- ❑ It is enough to power the entire farm (275,000 kWh usage each year).
- ❑ Significantly reduces methane emissions by more than 700 metric tons of CO<sub>2</sub>e each year.
  - ❑ Equivalent of eliminating annual GHG emissions from about 150 passenger cars
- ❑ Dairy farmers in California are successfully lowering cow methane emissions under the state's ambitious greenhouse gas reduction laws passed several years ago.
- ❑ The laws include manure methane emission reduction targets of 40% below 2013 levels by 2030.
- ❑ The state's Air Resources Board suggests much of that reduction should come from converting methane from cow manure into energy.



# Methane Digester's Sustainable Benefits

## *Operating on Straus Dairy Farm since 2004*

- ❑ The most important is preventing methane gas from entering the atmosphere.
- ❑ Methane is a greenhouse gas and a short-term pollutant that is 86 times more detrimental than carbon dioxide within a 20-year period.
- ❑ The system also greatly eliminates odors on the farm and significantly reduces flies.
- ❑ In addition, two products — separated solids and leftover liquids — are used as organic fertilizer on pastures.
- ❑ This system allows the Straus Dairy Farm to run electrical meters in reverse and to offset electrical usage from other meters at the farm.
- ❑ Some studies are pointing toward a 90-95% reduction in pathogens such as E.coli.
  - ❑ [Farm Energy: Pathogen Reduction in Anaerobic Digestion of Manure, April 3, 2019](#)



### THE SUSTAINABLE FACTS:

**80kW**

Generator capacity

**6M SCF**

Annual Biogas Capture

**750kWh**

Average performance per day

**275,000kWh**

Average performance per year



# Low Carbon Fuel Standard Program

## *First-Of-Its-Kind Straus Dairy Farm & BMW Group Collaboration*

- ❑ Straus Dairy Farm and BMW Group made a low carbon-intensity fuel (bio-electricity) for certain BMW electric vehicles in California.
- ❑ This joint effort is part of California's Air Resource Board's *Low Carbon Fuel Standard Program*.
  - ❑ Increases dairy farmer revenues for renewable energy produced by methane biodigesters
  - ❑ Helps reduce climate emissions associated with electric vehicle charging.
  - ❑ Support long-term investment in dairy climate solutions for our local organic dairy farms.

